

REMARKS

Claims 1-43 are currently pending in the present application, with claims 1, 16, and 29-30 being written in independent form. Claims 1, 3-4, 6, 8-21, 23-24, 28-35 have been amended for clarity. New claims 37-43 have also been added. Applicants submit that all amendments to the claims are fully supported by the originally-filed application (e.g., p. 7, ln. 13-15). Thus, no new matter has been introduced.

Objection to the Specification

The specification remains objected to on grounds that “the specification still contains several other errors and misspellings that have not been corrected.” *Final Office Action (01/26/2009)*: p. 2.

Applicants have further amended the specification to correct the various informalities within. Thus, Applicants submit that the amended specification is no longer “in such faulty English that a new specification is necessary”. *MPEP 608.01(q)*. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw this objection.

Claim Rejections under 35 U.S.C. § 112

The claims stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully traverse this rejection for the reasons below.

With regard to claim 2, the Examiner states that the claim is “not in proper alternative format.” Applicants note that the plain meaning of “at least one of” *clearly* indicates that conductive nanoparticles may include ATO, ITO, or AZO individually or

in combinations thereof (e.g., ATO, ITO, AZO, ATO + ITO, ATO + AZO, ATO + ITO + AZO, ITO + AZO, etc.). Thus, the scope of claim 2 is not indefinite.

With regard to claims 3, 6, 8, 10, 12, 14-15, 17, 19, 21, 24, 31, and 33-34, the Examiner states that the use of the character “~” within the claimed ranges is unclear. This rejection has been rendered moot by the amendments to the claims.

With regard to claim 9, 11, 20, and 30, the Examiner states that it is unclear what is meant by “anti-hydrolic” and “hydrolic,” because the words are “not English terms.” This rejection has been rendered moot by the amendments to the claims.

With regard to claim 11, the Examiner also states that there are “misspelled resin names.” Applicants have corrected the misspellings in claim 11.

With regard to claims 23 and 35, the Examiner states that “it is unclear what is meant to be encompassed by the term ‘series.’” This rejection has been rendered moot by the amendments to the claims.

With regard to claim 28, the Examiner states that the limitation “pencil intensity” has not been defined by the claims or the specification. As previously noted, “pencil intensity” is a *term of art* that is readily appreciated by those of ordinary skill. Thus, an explicit definition is not required for what is already known in the art. In any event, “pencil intensity” is explained on p. 14, ln. 14-22 (e.g., “wavelength integral with a product of spectro-emission flux and spectro-luminous efficiency”) and p. 15, ln. 2-3 (pencil intensity “measured on the standard of JIS K5651-1966”) of the original specification. Furthermore, pencil intensity data is shown in Tables 1-4 on pp. 18-23 of the original specification. Consequently, “pencil intensity” does not render claim 28 indefinite. In any event, “pencil intensity” has been amended to read “pencil hardness” for added clarity.

With regard to claim 28, the Examiner also indicates that the limitation “heat-ray cutoff rate of 50%” is unclear. Applicants have amended claim 28 for added clarity. Additionally, “heat-ray cutoff rate” is discussed on p. 14, ln. 23-26 (“IR cutoff”) and p. 18, ln. 7-10 (“heat cutoff rate (IR-C)”). Furthermore, the heat cutoff rate (IR-C) for various samples is shown in Tables 1-4 on p. 18-23 of the original specification.

Claim Rejections under 35 U.S.C. § 102

Claims 1-23, 25-26, and 30-35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by US 5,807,511 (Kunimatsu). Applicants respectfully traverse this rejection for the reasons below.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Kunimatsu fails to disclose a dispersion sol including conductive nanoparticles uniformly dispersed in a “solvent formed **essentially** of an **amphiphilic** material, wherein the solvent with the conductive nanoparticles dispersed therein has **amphiphilic** properties,” as recited by amended claims 1, 16, and 29-30. Rather, the solvent of Kunimatsu is a *mixture* of various solvents, which have not been shown by the Examiner to be amphiphilic. For instance, although Kunimatsu discloses ethylene glycol monoethyl ether, the ethylene glycol monoethyl ether is *combined* with *at least* xylene, toluene, methyl ethyl ketone, and methanol and forms only about 11 % of the resultant solvent. *Kunimatsu*: Table 1 (solvent). Thus, the *resultant* solvent of Kunimatsu is not formed essentially of an amphiphilic material and has not been shown by the Examiner to have amphiphilic properties.

With regard to new claims 37-43, Kunimatsu fails to disclose conductive nanoparticles being present "in an amount of **at least 20 wt %** relative to the dispersion sol." Rather, Kunimatsu teaches that the oxide powder (e.g., ITO, ATO) is present in an amount of only about 5-10 wt % relative to the composition mixture. *Kunimatsu*: col. 4, ln. 22-27; Table 1 (Examples 1-4).

For instance, Example 1 (Table 1) of Kunimatsu shows that the ITO powder is present in an amount of 9.98 w %.¹ Example 2 (Table 1) of Kunimatsu shows that the ITO powder is present in an amount of 9.97 wt %.² Example 3 (Table 1) of Kunimatsu shows that the ITO powder is present in an amount of 5.18 wt %.³ Example 4 (Table 1) of Kunimatsu shows that the ATO powder is present in an amount of 9.98 wt %.⁴

For at least the reasons above, there can be no anticipation with regard to claims 1, 16, and 30. Consequently, there can be no anticipation with regard to claims 2-15, 37, claims 17-23, 25-26, 38-41, and claims 31-35, 43, at least by virtue of their dependency on claim 1, claim 16, and claim 30, respectively. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the above rejection.

Claim Rejections under 35 U.S.C. § 103

Claims 24, 27-28, and 36 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kunimatsu. Applicants respectfully traverse this rejection for the reasons below.

¹ $36/(100 + 36 + 0.07 + 0.08 + 0.09 + 0.40 + 75 + 50 + 70 + 25 + 4)$

² $36/(100 + 36 + 1.20 + 75 + 50 + 70 + 25 + 4)$

³ $9/(63 + 37 + 9 + 0.02 + 0.03 + 0.03 + 0.12 + 4 + 16 + 16 + 2 + 26 + 0.5)$

⁴ $36/(100 + 36 + 0.07 + 0.08 + 0.09 + 0.40 + 75 + 50 + 70 + 25 + 4)$

The above-discussed deficiencies are neither disclosed nor suggested by Kunimatsu.

For at least the reasons above, a *prima facie* case of obviousness cannot be established with regard to claims 16 and 30. Consequently, a *prima facie* case of obviousness cannot be established with regard to claims 24, 27-28, 38-41, and claim 36, 43, at least by virtue of their dependency on claim 16 and claim 30, respectively. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the above rejection.

CONCLUSION

In view of the above, Applicants respectfully request the Examiner to allow all of the pending claims in the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicants hereby petition for a one (1) month extension of time for filing a reply to the outstanding Final Office Action and submit the required extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. §1.17; particularly, extension of time fees.

Respectfully submitted,

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By

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